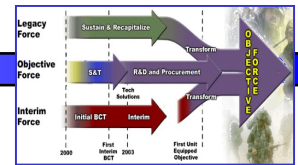




Single Stock Fund

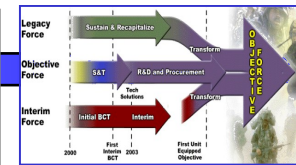


Milestone 3 Transaction Volume Analysis

11 October 2001



Middleware



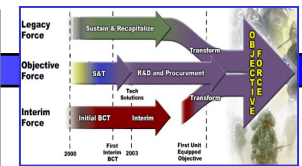
- **PURPOSE:**

**To Provide Status Of The Single Stock Fund (SSF)
Milestone 3**

Transaction Volume Analysis Update



SSF MS 3 Model Methodology



Use MS 1&2 Transaction Volume Analysis as baseline “as is” model

Use “as is” to model SSF MS3 business rules and middleware logic update for a “to be” SSF model

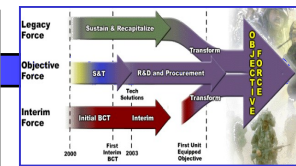
Analyze affect on DASD and CPU capability

Analyze three data points within SSF Systems

- SARSS2AC/B output to SSF MW
- SSF MW output to SARSS Gateway, ISB, and DAASC via SARSS CTASC router
- SARSS Gateway to CCSS via RTP (DNA concern)



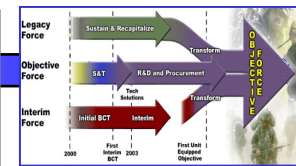
MS3 Assumptions



- **RON/DON may be utilized (Field option)**
- **SARSS using “L” class CTASC**
- **Partial issues will be made at SARSS-1**
- **ALL SARSS-1s at MS III (AWCF) (End State)**
- **SARSS Gateway file will be routed to CCSS via RTP
(Contains all balance affecting transactions)**
- **MS 1&2 Volume Analysis report Data set used for MS3 analysis**
- **MS3 will not have additional bandwidth for communications
(Not believed to problematic)**



Transaction Volume Analysis



- **Determine the increase of transaction volume resulting from SSF MS3**
 - **Policy changes**
 - Turn on RON/DON
 - Turn on partial issues
 - Pass customer demand data to CCSS.
 - **Middleware**
 - Re-routing AWCF transactions (F09 Vs OSC)
 - Using CTASC as router
 - **Determine SSF Systems Processing capacity requirements**
 - Transaction Volumes in Wartime (worst case using CASCOM wartime volume (1.3M daily))
- Milestone 3/SSF End state

Largest Contributing Factor to MS3 Transaction Increases

SCOPE

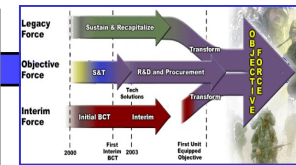
Focused on SSF

Pre-existing deficiencies
Other Policy Changes

Concerns



Transaction Volume Analysis

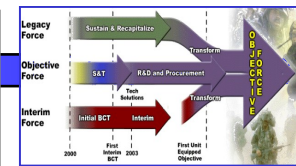


- ◆ **Phase 1** - Baseline “MS 1/2” transaction volume model
 - ◆ Specific time period
 - ◆ Using SARSS2AC/B Doc History
 - ◆ Gather all of the transactions generated at SARSS2AC/B
 - ➔ **Result:** Volume by transaction type and destination system

- ◆ **Phase 2** - Apply MS3 changes to the model
 - ◆ Policy changes
 - ◆ Middleware
 - **Result:** “MS3 SSF” volume by transaction type and destination system



Transaction Volume Analysis



◆ Step 1 - Create “As Is” transaction volume model using XVIII Corp data from Ft. Bragg

- ◆ 1.3 Million SARSS2AC/B transactions
- ◆ Load XVIII Corp database on NG CTASC
- ◆ Collect storage/disk capability on current sizing



◆ Step 2 - Use SARSS2AC/B Doc History for transactions

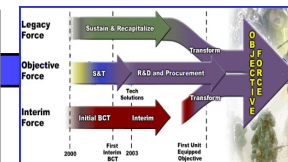
- ◆ Determine number of reciprocating transactions generated from and to all systems based on SARSS2AC/B A0_s
- ◆ Determine number of A0_s submitted (customer/SARSS-1)
- ◆ Determine number of partials

◆ Step 3 - Using MS1/2 data, apply MS3 rules to transaction model

- ◆ Determine number of reciprocating transactions generated from and to all systems based on SARSS2AC/B A0_s
- ◆ Determine number of A0_s submitted (customer/SARSS-1)
- ◆ Determine number of partials
- ◆ Determine number of SARSS referrals

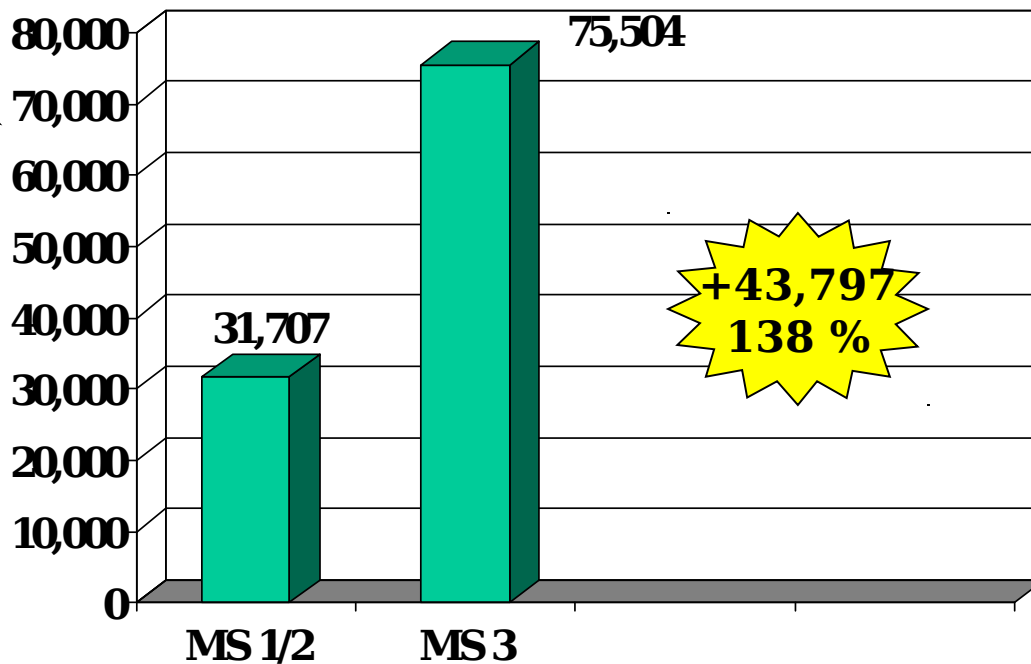


A0 Transactions in database



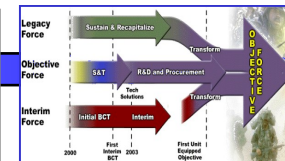
SARSS Doc Hist & New Trans Table

**Resumes
RON/DON & Partial
Supports DRD
(FD/DM logic)**



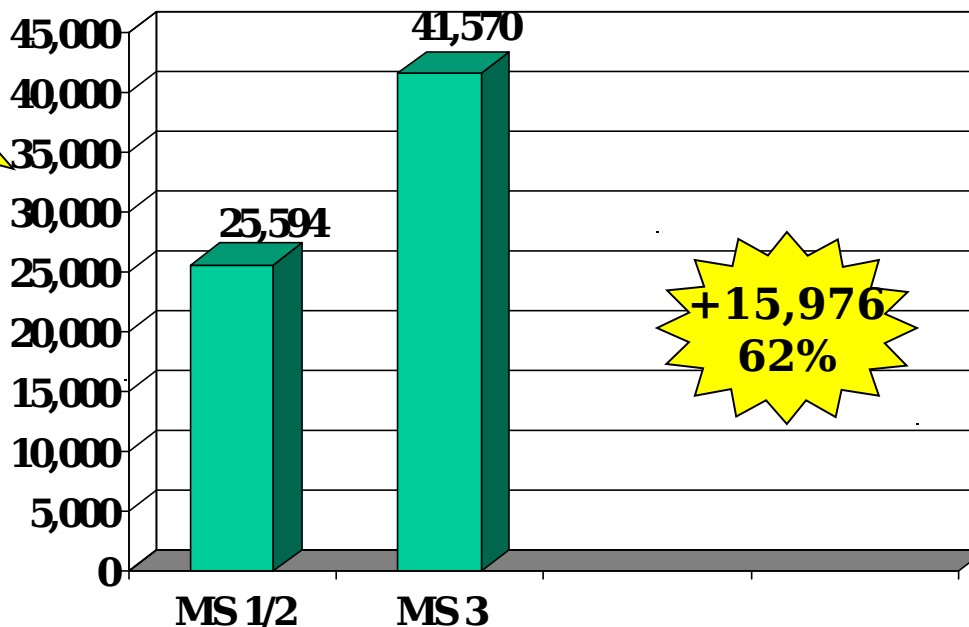


A0 Transactions forwarded to CCSS via SARSS Gateway RTP



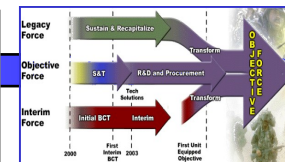
SARSS Requisitions to CCSS

**Resumes
RON/DON & Partial
increase data to RTP**



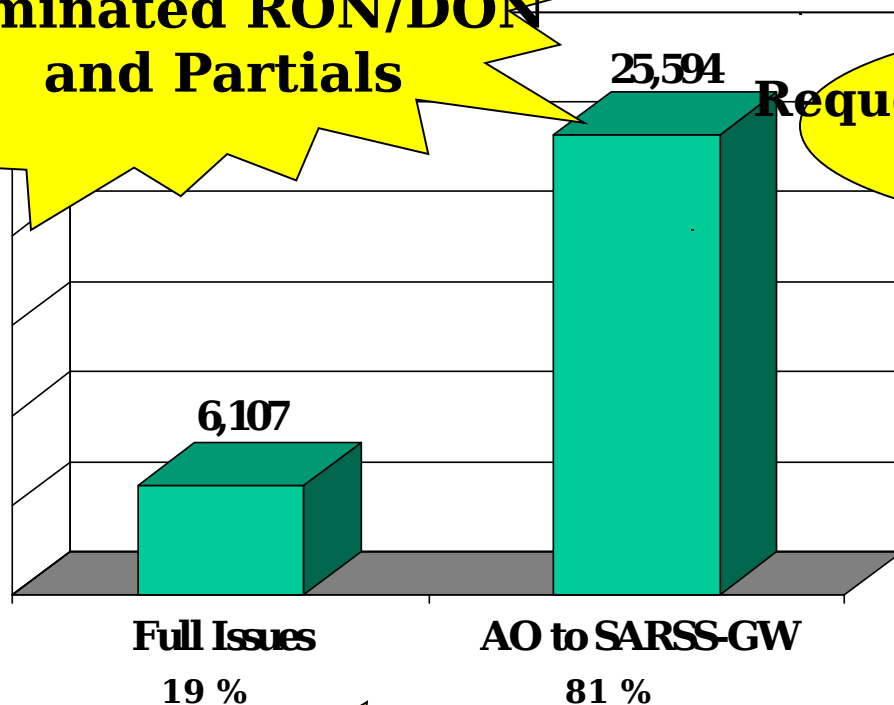


A0 Transactions MS 1/2

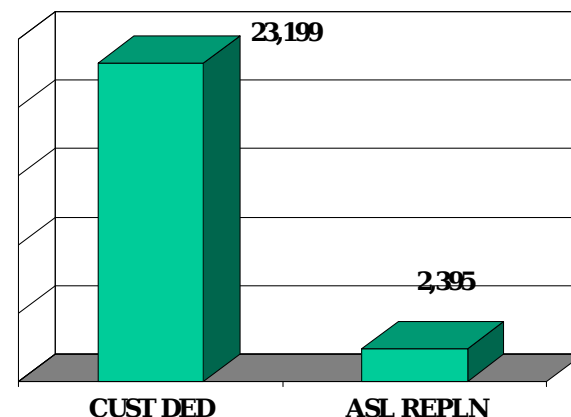


SARSS Doc Hist (31,701)

**Eliminated RON/DON
and Partial**



**Request passed from SARSS2AC/B
to SARSS Gateway RTP**

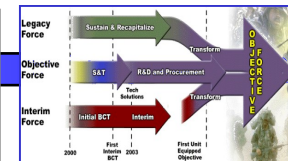


**80% were NAMI
(20,450)**

Sustaining The Transforming Army

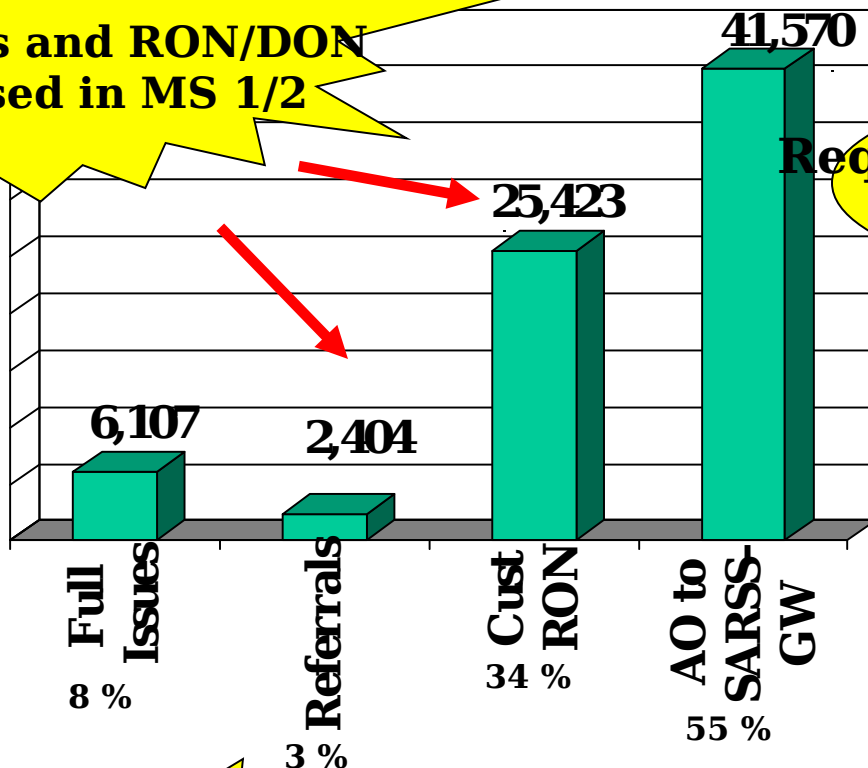


A0 Transactions MS 3

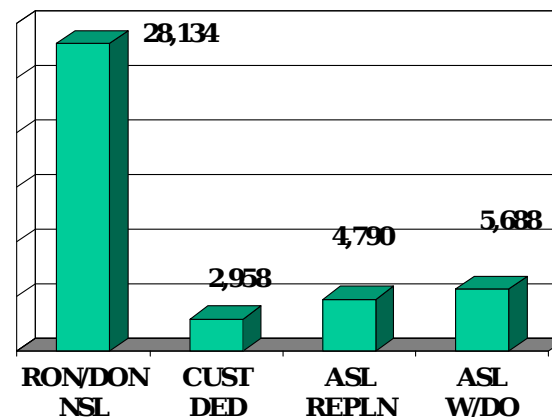


SARSS (75,504)

**Referrals and RON/DON
Not used in MS 1/2**



**Request passed from SARSS2AC
to SARSS Gateway**

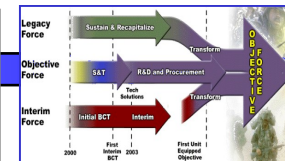


**80% were NAMI
(33,256)**

Sustaining The Transforming Army



SARSS DATABASE AFFECT



SSF Model Changes

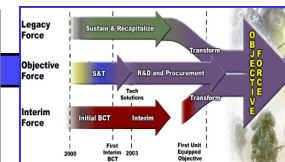
Affect on "L" series CTASC
Each CTASC can accommodate growth
4 RISC 440 MHz CPUs
4GB RAM
4ea 36GB DASC

Referrals Affect

TYPE TRANS	MS 1/2	MS 3	Difference	DB Byte Size	Increase Byte	% INCREASE
AODOCHSIT	31,701	75,504	43,803	119	5,212,557	138.2%
SUSP HDR	0	2,404	2,404	121	290,884	100.0%
SUSP DETAIL	0	2,404	2,404	65	156,260	100.0%
STATUS	71,196	69,483	-1,713	59	-101,043	-2.4%
RECEIPTS	10	6	-4	54	-216	-40.0%
SHIP	507	301	-206	68	-14,008	-40.6%
ISSUES	6,107	6,107	0	48	0	0.0%
A5 from CCSS	6,280		-6,280	48	-301,440	-100.0%
TOTAL	115,801	156,209	40,408			34.9%
DB BYTE INCREASE					5,242,994	63.2%



CTASC INPUT/OUTPUT FILES



1-Day "Wartime" MS 3 Model Changes

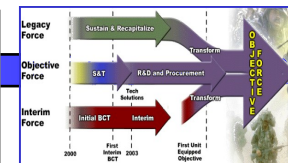
RTP allows moving balance transactions from AJU080 (DAAS) to AJUOSC (SARSS Gateway) (assist in keeping balances in sync)

- * AJRF09 ISB increases
- * AJU080 CCSS decreases
- * AJUOSC Gateway increases
- * AJU091 SARSS-1 no change
- * Input to SARSS from MW no change

DATA FILE	MS 1/2	MS 3	MS 1/2 BYTE	MS 3 BYTE	CHANGE
AJ RF09	96,224	101,215	14,433,540	15,182,280	748,740
AJ U080	146,710	90,851	11,736,800	7,268,080	-4,468,720
AJ UOSC	34,641	107,867	3,152,331	9,815,897	6,663,566
SARSS2AC/1	5,290	5,290	423,200	423,200	0
AJ U091	144,173	144,173	11,389,667	11,389,667	0
ABF CHG	25,947	25,947	2,075,760	2,075,760	0
ABF TXN	62,497	62,497	4,999,760	4,999,760	0
ILAP	96,224	101,215	14,433,540	15,182,280	748,740
TOTAL	611,705	639,055	62,644,598	66,336,924	3,692,326



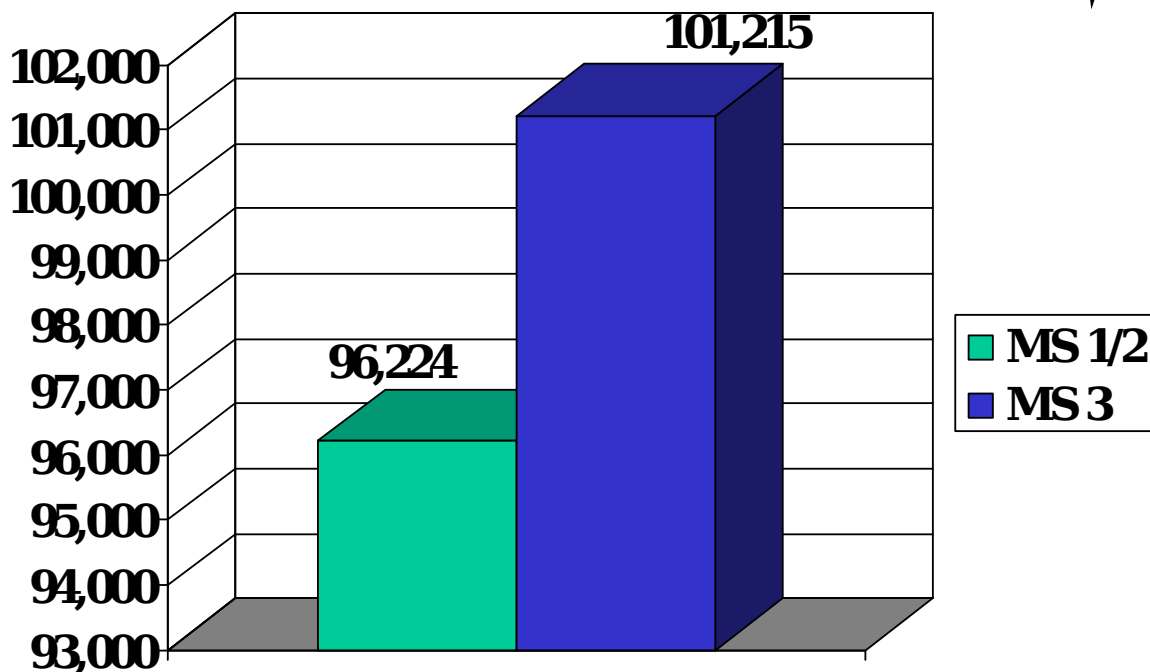
SSF MS 3 Model Changes



TRANSACTIONS OUTPUT TO ISB by SARSS2AC/B

RON/DON Major Impact

**4,991 Increase
5%**

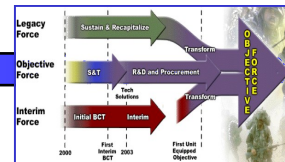


AJRF09

Sustaining The Transforming Army



MS 3 SARSS Gateway RTP

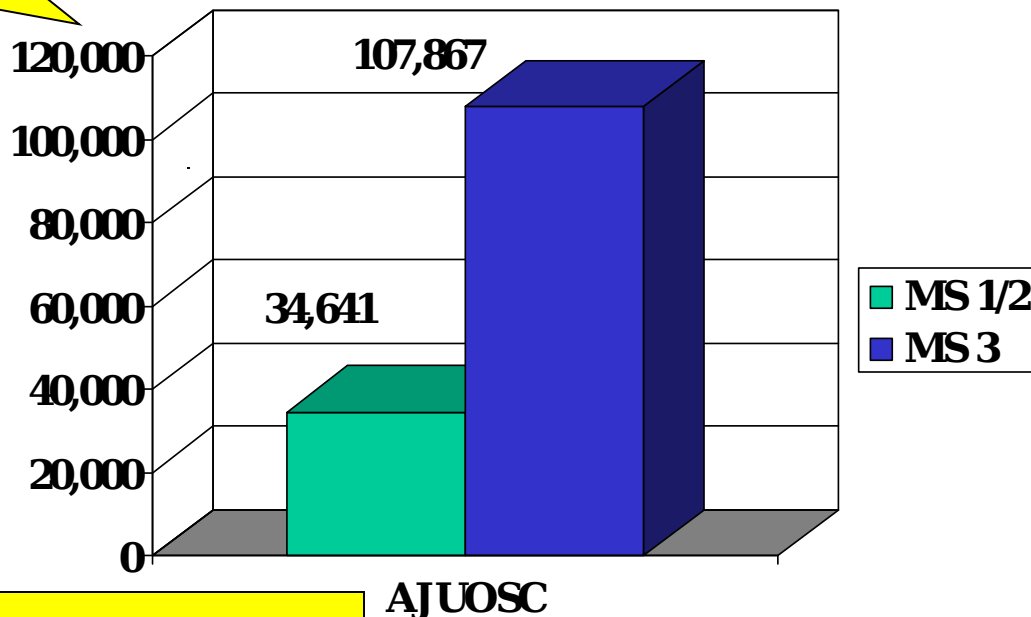


TRANSACTIONS OUTPUT TO SARSS-GW

**RON/DON
Partial Issue
Balance Affecting Transactions**

**73,226 Increase
211%**

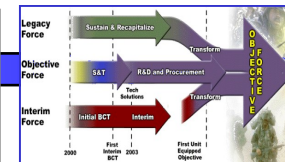
RTP
Assist in keeping balances in sync
DICS
A6_
AC_
AM_
DRA_
D8_
D9_
DAC
DAD
D6A
D6M
D6K



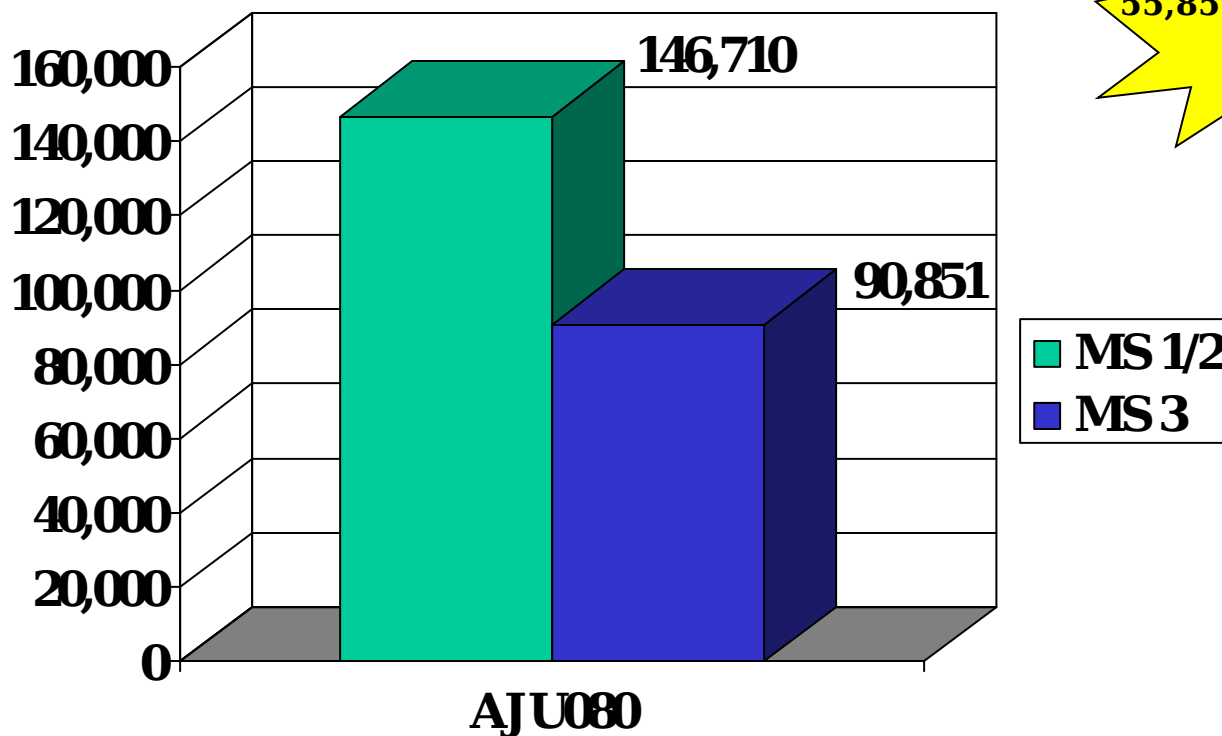
NOTE: These are routed to CCSS via RTP



SSF MS 3 Model Changes



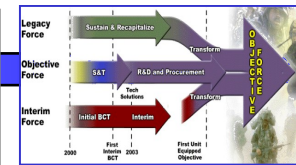
TRANSACTIONS OUTPUT TO DASSC SYSTEM



**55,859 Decrease
38%**



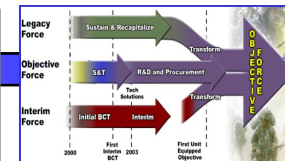
Summa ry



- ◆ Data will be used by CSC STL to determine affect on DNA and DECC hardware requirements
- ◆ PM ALIS, SDC-L analysis of “L” class CTASC has determined that CTASC can accommodate MS3 transaction volume
- ◆ No know issues with installation bandwidth for transmitting data off installation via current network capabilities



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